## **CLAIMS**

## 1. A structure comprising:

a buried cavity in a semiconductor material body having a shape, in cross section, in which a top wall is approximately parallel with a horizontal plane of the semiconductor material body, side walls slope inward from the top wall to a bottom wall, and the bottom wall is approximately parallel with the top wall.

- 2. The structure according to claim 1, wherein the top wall comprises a lattice of a first and a second layer, said first layer comprising silicon-dioxide, said second layer comprising silicon-nitride.
- 3. The structure according to claim 2, wherein said lattice has a plurality of interstitial openings.
- 4. The structure according to claim 3, wherein said plurality of interstitial openings in the lattice are filled with tetraethyl orthosilicate.
- 5. The structure according to claim 3, wherein said plurality of interstitial openings in the lattice are filled with polycrystalline silicon.
- 6. The structure according to claim 5, wherein said top wall of said buried cavity further comprises a grown, and wherein communication openings extend through said grown layer and said lattice layer to said buried cavity.
- 7. The structure according to claim 3, wherein each of said plurality of interstitial openings has a square shape, as viewed from above the horizontal plane of the semiconductor material body.

- 8. The structure according to claim 3, wherein each of said plurality of interstitial openings has a rectangular shape, as viewed from above the horizontal plane of the semiconductor material body.
- 9. The structure according to claim 2, wherein said lattice is oriented to an angle of between 44° and 46° with respect to a flat of said semiconductor material body.
- 10. The structure according to claim 2, wherein said lattice is oriented to an angle of between 30° and 60° with respect to a particular crystallographic plane of said semiconductor material body.
  - 11. A structure, comprising: a semiconductor material body;

a cavity formed within the body, the cavity having a substantially planar lower surface lying in a plane that is approximately parallel to a plane of an upper surface of the body;

a cover over the cavity comprising a coating layer formed on the upper surface of the body; and

a communication opening extending in the cover as far as the cavity.

- 12. The structure of claim 11 wherein the cover further comprises a lattice layer formed on the upper surface of the body.
- 13. The structure of claim 11 wherein the coating layer is a polycrystalline-silicon layer.
- 14. The structure of claim 13, further comprising a layer grown on the polycrystalline-silicon layer.

15. A structure, comprising:

a semiconductor material body;

a cavity formed within the body,;

a cover over the cavity comprising a lattice layer having a plurality of openings, formed on an upper surface of the body, and a coating layer formed on the lattice layer, the coating layer closing the plurality of openings; and

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a communication opening extending in the cover as far as the cavity.

- 16. The structure of claim 15 wherein the coating layer is a polycrystalline-silicon layer.
- 17. The structure of claim 16, further comprising a layer grown on the polycrystalline-silicon layer.